

MAR/APR

1989

RANTOP

NEW WESTSIDE
MEETING PLACE!
(SEE EDITORIAL)

THERE WILL BE A
MEETING 4/28 AT
EUCLID SQ. MALL
FOR CATS FEST
PEOPLE

Please note: All are invited but the meeting
will be for those attending the CATS FEST in
Washington DC MAY 5,6,7. 7:30 - 9:30 SEE INSIDE

Software Review:

by Gene Wilson, GCT/SUG

MAILBAG: Author: Peter Hale
EMSOFT Software for the QL.
256K+ required
Price for DSQD flpy \$19.95
MICROCART. 21.95 Both ppd

Address: Estate Management Services
P. O. Box 8763,
Boston, MA 02114-8763
A/C 617 889-0830

In the past year it has been my pleasure help with the rounding up of my old high school classmates for a fiftieth class reunion. I thought I would be smart and set up a database on my QL using PSION's Archive. Well I'm not as smart as I hoped and just couldn't get my procedures to function properly. At the rate I was going I knew that it would be about the hundredth reunion before I'd get a good database. I don't think I'll live that long. While helping to

get things organized for the '88 Mid West summer conference I was asked to contact a couple hitherto unknown vendors. Emsoft was one. I believe that one of our committee found the in the Computer Shopper. I called and they declined a table but asked if we would put out some literature for them. Naturally we did. I talked with Peter Hale at the time and he forwarded the material.

When I saw the brochure I knew that I was going to get it. Even it it didn't do my job it wouldn't be an awful loss.

Of course the first thing to do with a new program is to back it up which I promptly did. I have the good fortune to have an eighty track dual disc drive. That really helps. First I loaded my Archive which is on disc. Put MAILBAG in drive 2 type in <lrun> Enter <boot> Enter. That starts the loading. Since the whole program is in "super basic" it is rather slow loading. On startup it asks for type device used. Type in flp and <Enter>

When loaded the screen displays a directory of medium in drive 2 and asks that you verify that you understand. <y-n> I didn't understand so I typed in "n" thinking I would get a help menu. It told me to read the manual. I didn't have a manual so I tried to bring up a menu by typing "menu". I fooled around with this for a while and kept getting the first two lines for the menu with an error message.

I went back to the little sheet of finely printed instructions and in the next to the last paragraph I saw a statement that said there is an _doc file for Quill. I immediately reset the computer and loaded my Quill program. I got the dir on flp_2 and there it was, a complete manual, 14 1/2 pages. I loaded it up and copied it on the printer.

MAILBAG is primarily a subscription type data program. However it can be easily used as an address file by ignoring the Issues criteria.

simply <Enter> when you come to those items. There are 3 lines for notes.

The file can be sorted on first name, last name, zip, data in notes 1 and 2 and an extra name.

You can design your own labels or use their custom label layout for 15/16" labels. The menu offers several choices for printing such as address book, File in three columns, two sizes for rotary cards, etc.

I also copied the procedures which took up ten pages of condensed printing. That made it easy to find the right procedures when I went in to customize certain ones to my special purposes. Customizing was easier than I thought it would be.

I have set up two distinct files, one of which is personal names and addresses with notes as to status, alive, deceased or unable to locate.

The other for companies and their person to contact for doing business.

A good feature of the program is that it automatically closes and re-

opens the file after every ten new records or updates.

A drawback is that each time you call up the menu, it has to reset before re-drawing the menu and when you go back to the file, you have to resort to get back where you were. Being in basic that can get tedious.

I have not used it for a subscription list, for which I believe is superbly suited.

When I've need help I have called Peter Hale and he was most helpful.

Generally speaking I'm quite pleased with the program. Not being an expert on the computer I feel I've done quite well with it.

March/April Editorial

Well here we are just a few weeks from the 4th anual Timex/Sinclair computer fest! This time it will be in Washington DC hosted by the CATS Group. The dates are May 6 & 7th with a dinner banquet Friday night. (The dinner is probably sold out by now) I plan to attend as well as many of our other members. If you are still looking for a ride and/or someone to share a room with, call Doug Gillespie. (216-884-8835) Doug is organizing the rides and rooms for those of you who want to share. There will be a meeting to finalize the rides and rooms as well as the manning of our table and any other arrangements that are to be made.

PLEASE NOTE THE FOLLOWING!!!

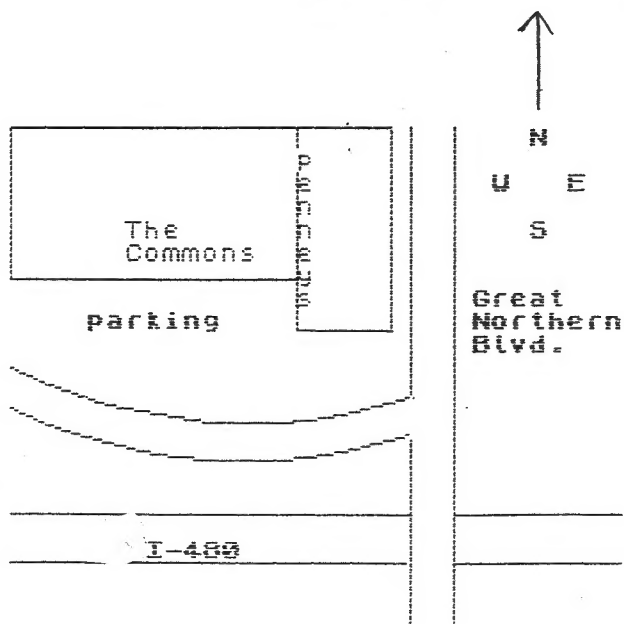
Starting with the MAY West Side meeting, we will be meeting at the GREAT NORTHERN MALL CONFERENCE ROOM! This is easy to get to. Just take 480 to the GREAT NORTHERN BLVD exit. Go NORTH and turn left at the BACK of the mall. Turn into and park by Rear entrance # 3. This is the last mall entrance (EAST) and next to JC PENNEYS). The confrence room is on the upper level in the COMMONS AREA. This is where the food vendors are. The meeting times are from 7pm to 9:30 and can be stretched to 10pm if required. Bob Parish made the arrangements for this.

APRIL WEST SIDE:

Jon Kazor will give his demo on the LAKIN MAX DOS. This includes the LARKIN disk system and the OLIGER disk system running together. He will also demo the LARKIN RAM DISK.

What has happened to TIME DESIGNS?

I have not received one since the last fest in Cleveland! (August '88). If you haven't received yours, write to TIME DESIGNS. The address is: 29722 Hult Rd., Colton, Oregon, 97017 Phone: 503-824-2658. Compuserve ID: 71350,3230.



upcoming CATS CapitolFest.

...Zebra Systems is said to be moving very quickly away from T/S oriented goodies. Apparently the CapitolFest will see a total sellout of their remaining T/S stock as they move into the RS CoCo world. If there was a particular software title or hardware item you've been meaning to pick up, DO IT NOW!! I've heard that Zebra won't accept any order for less than \$25 so you better hurry.

...Tim Woods where are you??? No one has been able to get in touch with Tim for quite a while. The Time Designs telephone is answered by a machine but messages aren't returned. We've heard about the various critical events that have impacted on the Woods family: the reported passing of Tim's dad must have understandably taken Tim's attention away from these actually quite frivolous matters but at the same time Tim must eventually let those who are patiently waiting to hear from him know what he has in mind for the future of Time Designs.

...we had NOVA 1000, multitasking for the ZX81. Now Lloyd Dreger of the SMUG group has developed "true multi-tasking for the 2068 a la the QL", to quote Dr.Dreger. The program to accomplish this was printed in the SMUG newsletter but under notice of copyright. We'll be getting in touch with the SMUG group to ask if we can reprint the program for our members to try.

...MS-DOS emulation on the QL is now a fact. RMG Enterprises recently sent out a flyer describing all the wonderful things you would be able to accomplish with your QL if you wanted to run MS-DOS without an MS-DOS machine.

...remember this word "SAM". You're going to be hearing alot about this word in the near future. The following is taken from the "Sinclair Scene" section of the British Computer Shopper. "SAM is a low-cost micro from Miles Gordon Technology with a modern specification - 256K of RAM, expandable to 512K, 64 colours, 85 column text or 512 X 192 dot graphics, and optional 780K 3.5" disk drives. From our tests it seems that SAM is actually MORE compatible with established Spectrum programs and add-ons than Amstrad's 'genuine' Spectrum Plus Three. Designer Bruce Gordon has five years experience

building third-party Spectrum add-ons, so he knows the ins and outs of Spectrum compatibility. For instance, SAM recognises IN 10495, the attribute port which is used by many programs but not implemented in the Spectrum Plus 3 or Plus 2A. The SAM processor is a Z808 running at 6MHz - 70 per cent faster than the Spectrum's 3.5 MHz Z80A. Most Spectrum games run at the normal speed as their code tends to be synchronised to the display frame time but utilities and languages run noticeably faster on SAM. The original projected price was 99 pounds but that has been overtaken by chip price changes. The new prediction is £199 for the disk version and around £140 for the cassette version. Both come with 256K of memory but can be expanded to 512K by plugging in two extra chips into pre-installed sockets inside. The SAM ROM is dramatically different from Sinclair's. It's twice as long - 32K, in two 16K banks. The BASIC interpreter is derived from the Spectrum Product BetaBASIC. SAM runs existing Spectrum BASIC programs and the best features of the ZX BASIC remain. SAM can load and run ZX BASIC because it detects the old file format and re-tokenises the entire program in a brief pause after loading and before running. You can save your ZX BASIC program back but it won't run on a Spectrum - in this case compatibility is a one-way path. SAM has a palette of 64 display colours, like IBM's EGA colour display. It supports four graphics modes compared to the Spectrum's one.(shades of the 2068...ed) SAM has flexible memory paging in 16K chunks. You can divide RAM into several sections, each of which looks like a separate computer. Users can swap between displays or program areas at any time, so - for instance- a 256K SAM could arrange its memory as five 48K sections each with a different program inside! You can load several machine-code programs at a time even if each one expects total control of a 48K computer. You could swap programs by pressing a special key that calls up SAM's palette and memory manager. The sound chip is the only obscure part of SAM - it's a Philips SA-1099, programmed much like the AY-3-8912 in the Spectrum 128 but

Give a Voice to your QL

Make your QL talk and say anything for under \$100.00 and you don't have to be an electronics wizard to do it! With the following information you will be able to put speech in your QL games that are in QL Super Basic. You will be able to have the QL speak and read back to you a Quill document. Any QUILL_DOC files for game instructions or terminal use instructions or any ASCII_DOC or ASCII text can be spoken. You can have the QL read and speak the line listings of super basic programs, either all or part of them. You could have the QL say, "Hello master, What would you like to do?", When you BOOT up.

First, you need to order the following from B.G. Micro, P.O. Box 280298 Dallas, Texas Phone No. (214)-271-2462. They take Master Card and Visa. Adds for these items can be found in COMPUTER SHOPPER. B.G. Micro usually has at least two full pages of ads in it each month. You will need the TEXT TO SPEECH BOARD, cost is \$69.95 plus \$3.50 for shipping & handling. You will need the TEXT TO SPEECH POWER SUPPLY, cost is \$19.99 plus \$2.50 for shipping and handling. Do not try to cut cost by not ordering the power supply! You will need it to complete this project unless you can make a 1 amp supply that provides both 5 volts dc and 12 volts dc to an edge connector that fits the speech board's line tracings for power in. Doing it yourself will cost you the saved \$20.00 and if you buy it you get a 1 amp 9 volts dc power pack that you can always use to power a CASIO or YAMAHA keyboard with.

The SPEECH CARD was designed to fit an I.B.M. PC or PC Clone bus slot and take the power required, 5 volts dc and 12 volts dc from the bus slot. The data for it to speak is input to a RS-232 input port on the back of the card.

The TEXT TO SPEECH POWER SUPPLY is a small circuit board with components on it to take the 9 volts dc input from the power pack that comes with it and convert that to the 5 volts dc and 12 volts dc and has a female slot connector on it so that the SPEECH CARD can be plugged into it. This makes it a stand alone unit.

You can unscrew the fasteners from the SLOT STAKE on the back edge of the TEXT TO SPEECH CARD and remove it. For QL use, you won't need it. It's there for use with an I.B.M. PC or Clone. Plug the TEXT TO SPEECH CARD into the SPEECH CARD POWER SUPPLY circuit card, (ALL PLUG INS FACE TOWARD THE BACK EDGE) and plug the power cord (9 volts dc end) into the SPEECH CARD POWER SUPPLY. Now you need to build a box to incase it in. I made a box out of 1/8" thick plexa-glass, 2" WIDE X 6" HIGH X 9 1/2" LONG. I used ACETONE, a clear liquid that melts plastic to glue the panels together. You can get those items at a building material hardware store. Use any none conducting material to make the box that you wish and make a pattern of holes for sound to escape for the card's speaker. You will need an access hole pattern cut for the FEMALE RS-232 connector on the back panel edge of the TEXT TO SPEECH CARD once it's inside the box. Leave about 1/16th of an inch space around that cut out for the outside edge of the MALE RS-232 connector to fit over the outside edge of the FEMALE RS-232 connector on the back end of the TEXT TO SPEECH CARD. Since I used 1/8" thick plexa-glass, I cut a hole out of the back box panel to fit the edge of the FEMALE RS-232 connector and drilled to 1/8th inch holes to line up with holes that the slot stake was attached to the RS-232 connector and used the hardware screws from that to attach it to my 1/8" thick X 2" wide X 6" long plexa-glass back panel. I did that so the cards plugged into each other would be in the box with the power supply card resting on the bottom panel once I glued it on. I then used the ACETONE to glue all the other sides edges together to form the box.

Now that you have the TEXT TO SPEECH CARD plugged into the SPEECH CARD POWER SUPPLY and the POWER SUPPLY'S 9 volt dc line from the POWER PACK plugged in and the unit in a box with the FEMALE RS-232 connector accessible. You will need to make the 9 PIN DIN cable from the SER1 serial port on the QL to the DB-25 PIN FEMALE serial data input port on the TEXT TO SPEECH CARD. The instructions and technical data sheet and schematic diagram that B.G. Micro provides are very good. They list pins 1,2,3,4,5,6,7 and 8 on the FEMALE 25 PIN SERIAL PORT of the TEXT TO SPEECH CARD as being the only pins used and with number 3 NOT USED and 1 as GROUND. Keep in mind that this was engineered for an I.B.M. PC and it's Clones. Your cable will be wired for the QL's Serial Port (SER1) that is used for the serial printer data out port. You will not need an eight wire cable or a seven wire cable, because pin 3 is not used. Pin 1 is ground and the schematic of the speech card shows no connection of pin 1. You will not connect pin 8 either. This means that you only need a 5 wire cable. The ATARI JOYSTICK CABLE has 6 color coded wires in a nice vinyl jacket and replacement ATARI JOYSTICK CABLES can be found at almost any department store and

even Radio Shack sells them. I used a 6 foot length of ATARI JOYSTICK CABLE. Connect the cable to the following pins, wire for wire, pin to pin using 6 feet of Atari joystick cable or any suitable color coded cable, one D Subminiature 9 PIN MALE, Solder Type, Radio Shack Part No. 276-1537 and Hood, one 25 PIN MALE, Solder Type, Radio Shack Part No. 276-1547 and Hood. You will have to buy the Hoods separately and they will fit either male or female of their type. They do not have to be metalized or chrome plated. Plain plastic ones will work and the connectors and cable doesn't need to be from Radio Shack. The pin numbers are marked by each pin both front and back of each of the two connectors. Find the pin number on the 9 pin connector and solder the listed wire for that pin and do the same, wire for wire, at the other end on the 25 pin connector. I found that if you strip 1 1/4" inch of the vinyl jacket off the wires at each end and strip 1/8th inch off the insulation off of each wire and twist it before you pull it completely off, Then tin each of the 1/8" striped and twisted wires before soldering to the connector pins works best. These wires will be inserted into the holes in the connector pins on the back side. Use 1/32nd rosin core solder (.032) to fill the hole in the back of the pin where the wire goes with solder by heating the outside edge of the pin with a pencil iron and the 1/32nd solder stuck in it's hole and letting solder fill it. Then heat the pin with the pencil iron and stick the wire in when the solder melts is the best way to do this. Tweezers or forceps are best to use to handle the small wires with while doing this. A needle nose plier with a rubber band looped around the handle, makes a great porta-vice to hold the connectors back side up while soldering. A suitable weight can be placed on the needle nose plier's handles to keep things from moving.

9 PIN DIN MALE FOR SER1

25 PIN DIN MALE FOR SPEECH CARD

PIN NO.	COLOR	PIN NO.
GROUND 7<	BLACK-----	>7GROUND
CTS 5<	GREEN-----	>5 CTS
RxD 3<	BLUE-----	>2 DATA IN
DTR 4<	ORANGE-----	>6 DSR
TxD 2<	BROWN-----	>4 RTS
N/C 6<	WHITE-----	>8 N/C

PIN NO. 1 IS NOT USED
PIN NO. 8 IS NOT USED
PIN NO. 9 IS NOT USED

PINS 1, 3, 8 THRU 25
NOT USED

The WHITE wire, number 6 is not needed, so trim it off to the vinyl jacket where it comes out at each end of the cable. Check your connections with a continuity tester or a volt/ohm meter set to ohms. If you have continuity pin for pin as for the above diagram and no shorts, put the hoods on. Your cable is done. Plug the 9 PIN DIN MALE Cable end into SER1 on the QL. Plug the 25 PIN MALE Cable end into the TEXT TO SPEECH CARD. Plug the wall plug end of the power pack into a 110 volt AC wall outlet. The TEXT TO SPEECH CARD should say, "O K". Power up the QL. Key in this short test QL Super Basic program and run it.

```
10 BAUD 2400:REMark This is the baud rate that speech card runs
20 OPEN #3,SER
30 PRINT #3,"      "REMark Ten spaces for initialization
                        May not be required
40 PRINT #3,"I HAVE A SPEECH CARD NOW AND I CAN TALK"
```

If it talked, then you have done everything right. Now you can tell the QL to LIST #3 and it should speak the line listings. You may have to key in (LIST #3 TO SER). Instead of sending data out to be printed, you can send data out to be spoken. You can copy all of the QUILL files to what media you use. LRUN the INSTALL_BAS program that comes with QUILL. Pick DEFAULT for the printer. Change the BAUD RATE to 2400 and save it. With the SPEECH CARD cabled and plugged in, BOOT up this version of QUILL. LOAD an QUILL DOC file. Tell QUILL to print that file. It should make the SPEECH CARD talk and voice that file.

You can follow the printer examples in the QL Manual for Line Listing and Line Print to be able to make the SPEECH CARD say a line, line listing or the line listings of a QL Super Basic Program. You can follow those examples to put speech lines in a super basic program to announce what a prompt expects you do, or you can have it say things like "WORKING" or "PLEASE STAND BY". There is no limit to what you can have it say.

By: Robert Parish

This was taken from:
ZX-Appeal The VACOUVER SINCLAIR USERS GROUP

Programming Tips on the 2068

Sometimes a programming problem can be easily solved by using certain tricks. Here are a few tips and techniques to help you possibly the next time you get stuck. I hope you will find them useful.

THE SAVE PROBLEM

To replace the message "Start tape then press Enter" you just need to POKE 26689, 38. Try:

```
10 PRINT #0; "All right, I'm  
ready.""Start your tape""AFTER  
that press ENTER"  
20 POKE 26689,38:SAVE "demo"
```

For those with a Spectrum ROM, POKE 23736,181 starts SAVEing immediatly, without waiting for a key press.

THE SCROLL PROBLEM

This little machine code routine scrolls a certain number of lines during a certain time. These codes can be put anywhere in memory.

```
10 CLEAR 49999  
20 FOR I=50000 TO 50020  
30 READ A: POKE I,A  
40 NEXT I  
50 DATA 205,220,27,205,96,  
38,237,67,250,91,197,  
253,70,192,205,59,9,  
193,16,246,201
```

Use this routine with INPUT USR add,x,y where add=start address and x= 1st line to be scrolled, y=how many times. With the routine at 50000, try:

```
10 CLS  
20 PRINT "....Don't move....."  
..  
30 INPUT AT 0,0;"Write something:";LIN  
E a$  
40 INPUT USR 50000,22,1  
50 PRINT AT 21,0;a$  
60 GOTO 30
```

THE LOAD PROBLEM

Large programs are generally recorded in several parts on cassette. After the

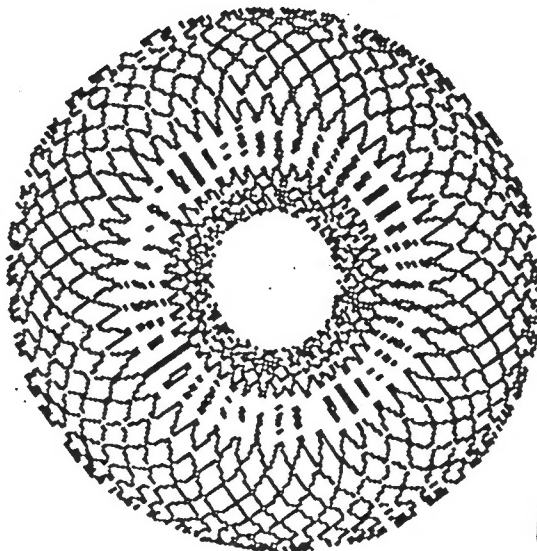
loader program, a screen presentation is loaded and the main program is now ready to be loaded. But it's not very esthetic when the program name overprints the screen presentation.

To avoid this situation, we can add to the loader program POKE 23570,16 and in the main program, we must restore by using POKE 23570,6. PRINT and LIST will be corrupted otherwise.

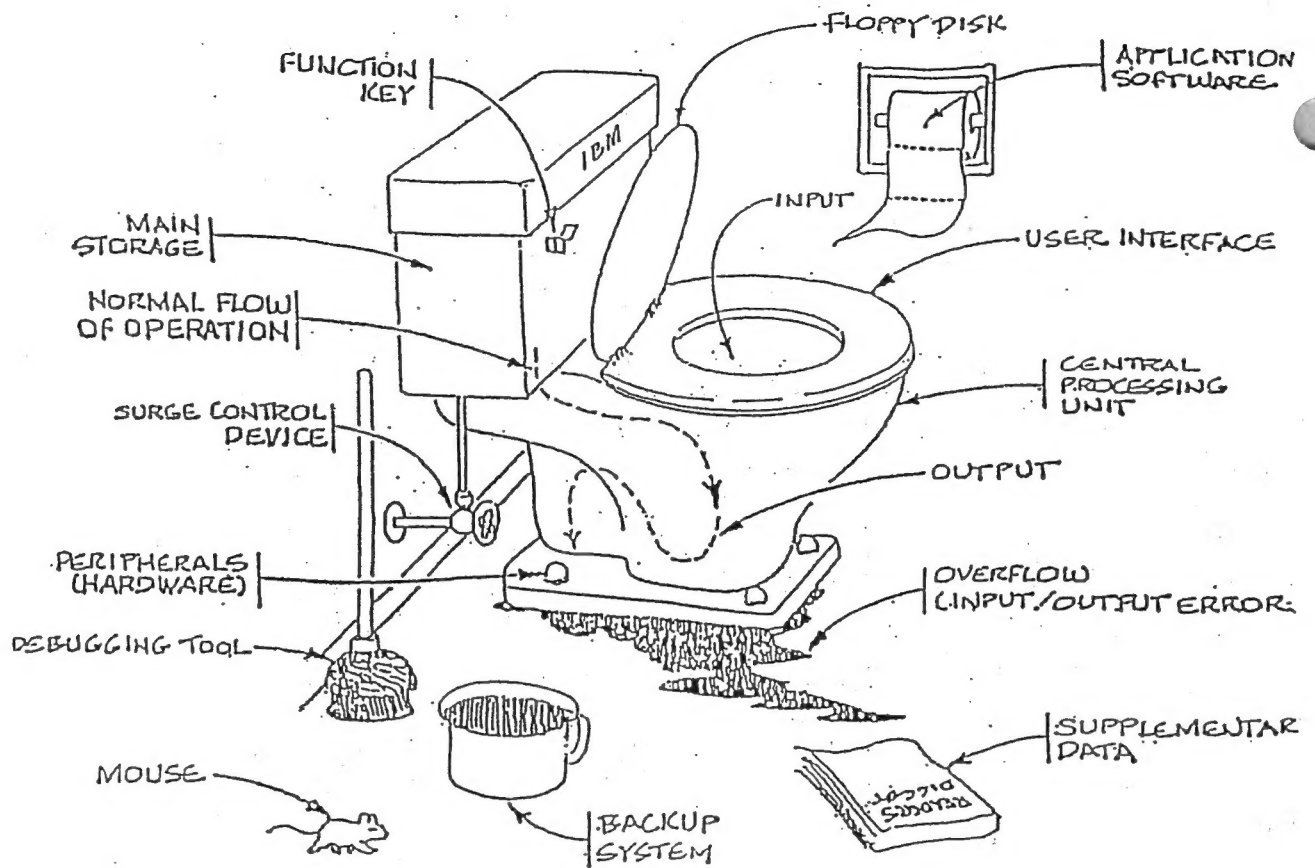
THE INKEY\$ PROBLEM

Suppose we have: 50 IF INKEY\$="y" THEN GOTO 100. If the keyboard is in lowercase mode, the computer will see "y" instead of "Y" and pass on to the next line. Again POKE will rescue us:

```
POKE 23658,8 for UPPERCASE mode  
POKE 23658,0 for LOWERCASE mode  
POKE 23617,2 for GRAPHIC mode  
POKE 23617,1 for EXTENDED mode
```



Understanding the Technology



From:

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FIRST CLASS MAIL